

CLAIMS:

1. An isolation mechanism for a boomed apparatus, wherein the boomed apparatus includes a movable boom and a control assembly, the isolation mechanism comprising:

5 a control handle which is actuatable by a worker to provide a control input; and

a linkage including a substantially electrically non-conductive material and operable to couple the control handle with the control assembly so as to communicate the control input therebetween, thereby substantially electrically isolating the control handle from the control assembly and the movable boom.

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2. The isolation mechanism as set forth in claim 1, wherein the substantially electrically non-conductive material is selected from the group consisting of: plastic, fiberglass, nylon, rubber, carbon fiber.

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3. A boomed apparatus comprising:
a movable boom having a distal end including one or more electrically
conductive components;
a work station coupled with the distal end of the boom and operable to hold
5 a worker;
a control handle located near the work station for allowing the worker to
provide a control input for moving the boom;
a control assembly operable to communicate the control input down the
boom; and
10 a linkage including a substantially electrically non-conductive material
operable to couple the control handle with the control assembly and
to communicate the control input from the control handle to the control
assembly, thereby substantially electrically isolating the control handle
from the one or more electrically conductive components of the boom
15 and from the control assembly.

4. The boomed apparatus as set forth in claim 3, wherein the
substantially electrically non-conductive material is selected from the group
consisting of: plastic, fiberglass, nylon, rubber, carbon fiber.
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5. An isolation mechanism for electrically isolating a control input mechanism for providing a control input to control a boomed apparatus, wherein the boomed apparatus includes a movable boom and a control assembly operable to communicate the control input through the boom for implementation, the isolation mechanism comprising:
- a boom extension including a substantially electrically non-conductive material and having a first end and a second end, with the first end being associated with the control input mechanism, the second end being coupled with the boom, and the control assembly running through boom extension, thereby substantially electrically isolating the control input mechanism from the boom.
6. The isolation mechanism as set forth in claim 5, wherein the substantially electrically non-conductive material is selected from the group consisting of: plastic, fiberglass, nylon, rubber, carbon fiber.

7. A boomed apparatus comprising:
a movable boom having a distal end including one or more electrically
conductive components;
a work station operable to hold a worker;
5 a boom extension including a substantially electrically non-conductive
material and having a first end and a second end, with the first end
being coupled with the work station and the second end being coupled
with the distal end of the boom; and
a control input mechanism operable to allow the worker to provide a control
10 input for moving the boom, with the control input mechanism being
located near the work station and the first end of the boom extension,
thereby substantially electrically isolating the control input mechanism
from the boom.
- 15 8. The boomed apparatus as set forth in claim 7, further including a
control assembly operable to receive the control input from the control input
mechanism and to communicate the control input through the boom, wherein at
least a portion of the control assembly extends through the boom extension.
- 20 9. The boomed apparatus as set forth in claim 7, wherein the
substantially electrically non-conductive material is selected from the group
consisting of: plastic, fiberglass, nylon, rubber, carbon fiber.

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10. An isolation mechanism for a boomed apparatus, wherein the boomed apparatus includes a movable boom and a control assembly, the isolation mechanism comprising:

a control handle which is actuatable by a worker to provide a control input;

5 a linkage including a substantially electrically non-conductive material and operable to couple the control handle with the control assembly so as to communicate the control input therebetween, thereby substantially electrically isolating the control handle from the control assembly and the boom; and

10 a boom extension including a substantially electrically non-conductive material and having a first end and a second end, with the first end being associated with the control input mechanism, the second end being coupled with the boom, and the control assembly running through the boom extension, thereby further substantially electrically
15 isolating the control input mechanism from the boom.

11. The isolation mechanism as set forth in claim 10, wherein the substantially electrically non-conductive material is selected from the group consisting of: plastic, fiberglass, nylon, rubber, carbon fiber.

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12. A boomed apparatus comprising:
a movable boom having a distal end including one or more electrically
conductive components;
a work station operable to hold a worker;
5 a boom extension including a substantially electrically non-conductive
material and having a first end and a second end, with the first end
being coupled with the work station and the second end being coupled
with the distal end of the boom;
a control handle operable to allow the worker to provide a control input for
10 moving the boom, with the control handle being located near the work
station and the first end of the boom extension such that the boom
extension substantially electrically isolates the control handle from the
electrically conductive components of the boom;
a control assembly operable to communicate the control input down the
15 boom; and
a linkage including an electrically non-conductive material operable to couple
the control handle with the control assembly and to communicate the
control input from the control handle to the control assembly, wherein
the linkage substantially electrically isolates the control handle from
20 the one or more electrically conductive components of the boom and
from the control assembly.
13. The boomed apparatus as set forth in claim 12, wherein the
substantially electrically non-conductive material is selected from the group
25 consisting of: plastic, fiberglass, nylon, rubber, carbon fiber.

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